Alan Burstein

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EDUCATION

Boston University College of Arts and Sciences, Boston, MA **May 2020**

BA/MS in Computer Science

GPA in Computer Science: 4.0

WORK EXPERIENCE

Bose Corporation, Software Engineer, Machine Learning May - August 2017

- Designed an end-to-end system for data harvesting, analyzing, storing, and searching podcast and playlist metadata.
- Developed responsive web applications for universal testing and NLU grammar editing.
- Implemented clustering and TFIDF weighting algorithms to generate recommendations for artists and playlists.

EBSCO Industries, Software Engineer, Data Analytics Summer 2015, 2016

- Analyzed data retrieved in response to customer queries to evaluate customer experience and suggest query refinement.
- Integrated tool into management level business analysis and assist in A/B testing
- Developed a customer facing application for broad spectrum search analytics.
- Implemented chi-squared and log-likelihood ratio algorithms to improve search engine result ranking.
- Built a D3 data visualization application to illustrate mappings of interconnected medical concepts.

Mass General Hospital, Cortical Physiology Lab, Research Volunteer June - August 2014

- Created 3D models and animations of a spinning epileptic brain with color-coded electrodes based on research data using MATLAB and Blender software to present lab results.
- Created and printed a prototype for glasses with electroencephalographic sensor using Blender to aid epileptic patients in monitoring for episodes.

Boston University Computer Science Department, Helpdesk Technician June - August 2013

- Developed a Python program to generate student activity reports from system logs.
- Built and configured virtual machines for computing labs using VMware virtualization platform.

ACHIEVEMENTS

- Massachusetts Mathematics Olympiad (MAML) 4th place. 2016
- American Mathematics Competitions (AMC), Honor Roll of Distinction 2016-2012

RELEVANT COURSEWORK

- Boston University: Analysis of Algorithms, Probability in Computing(Teaching Assistant), Advanced Programming and Data Structures, Computer Systems, Cryptography, Networks, Data Mechanics
- Harvard Extension: Multivariable Calculus, Linear Algebra.
- Online courses: Machine Learning (Stanford), Statistics 2.x (UC Berkeley).

TECHNICAL SKILLS

- Programming: Python, Java, C++, C, Assembly, HTML/JavaScript, MATLAB, R, LaTeX.
- Data Visualization: D3.js, HighCharts.js, Blender 3D.
- Platforms: Spring-boot, Flask, Node.js, Glassfish, Elasticsearch, AWS.